



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,971	10/24/2003	Mark A. Cleveland	024.0030	1835
29906	7590	11/04/2005		
INGRASSIA FISHER & LORENZ, P.C. 7150 E. CAMELBACK, STE. 325 SCOTTSDALE, AZ 85251			EXAMINER CHAMBERS, TROY	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,971

Applicant(s)

CLEVELAND, MARK A.

Examiner

Troy Chambers

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-20 is/are pending in the application.
- 4a) Of the above claim(s) 12-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 4-10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 3641

DETAILED ACTION

Information Disclosure Statement

1. The IDS filed by the applicant in the response mailed 07/26/05 has been acknowledged. All references have been considered with the exception of 2004/057787 A1, which is an array substrate for an LCD and issued to Nam - - - not Cleveland.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5743492 issued to Chan in view of EP 1355120 issued to Comtesse. Referring to Fig. 9, 22 and 23, Chan discloses a launch vehicle payload housing comprising first and second members 92, an explosive device to decouple first and second members 92 and a thrusting device 162.

However, Chan does not disclose a separation joint in which the first and second joints include flanges.

Comtesse discloses a separation joint having first and second members 14, 18 including flanges and an explosive device 16 within the joint to decouple first and second members 14, 18.

Art Unit: 3641

At the time of the invention, one having ordinary skill in the art would have found it obvious to provide the launch vehicle of Chan with the separation joint of Comtesse. The suggestion/motivation for doing so would have been to provide the situation in which the deformable portions of the connector avoid damage to the linked structural components on separation (Abstract).

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5743492 issued to Chan in view of U.S. 5735626 issued to Khatiblou. Referring to Fig. 9, 22 and 23, Chan discloses a launch vehicle payload housing comprising first and second members 92, an explosive device to decouple first and second members 92 and a thrusting device 162.

Khatiblou discloses a low-shock separating joint comprising a first member 22 including at least one flange 40; a second member 24 including at least one flange 50 corresponding to the first member flange 40. The flanges 40 of the first member flex outwardly over second member 40 and resumes its pre-flexed shape to mate therewith. Flange 40 of the first member 22 rests within a recess 52 of the second member 24 to prevent separation via compressive or tensile forces. An explosive device operates to decouple members 22 and 24.

At the time of the invention, one of ordinary skill in the art would have found it obvious to provide the launch vehicle of Chan with the separation joint of Khatiblou. The suggestion/motivation for doing so would have been to provide a separation joint requiring fewer parts and have a lower safety hazard classification (col. 2, ll. 15-20).

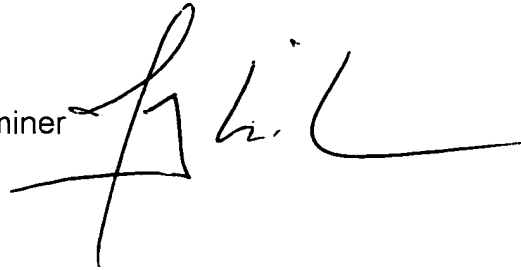
Art Unit: 3641

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (571) 272-6874 between the hours of 7:00 a.m. to 3:30 p.m., M-F. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (571) 272-6873.

Troy Chambers, Examiner

Art Unit 3641

A handwritten signature in black ink, appearing to read 'T. Chambers', is written over the printed name of the examiner.